UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,965	01/21/2005	Jean-Michel Sauvage	0518-1081-1	2112

466   7590   05/28/2009
YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER
JOSEPH, TONYA S

ART UNIT	PAPER NUMBER
3628	

MAIL DATE	DELIVERY MODE
05/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/521,965	SAUVAGE ET AL.
	Examiner	Art Unit	
	TONYA JOSEPH	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 March 2009</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-13</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-13</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some *　c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)　Paper No(s)/Mail Date. _____
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)　　　　　　**Office Action Summary**　　　　　Part of Paper No./Mail Date 20090526

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set
forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this
application is eligible for continued examination under 37 CFR 1.114, and the fee set
forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action
has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on
03/12/2009 has been entered.

Status of Claims

Claims 1-11 have been previously examined. No claims have been cancelled. Claims 1-
2 have been amended. Claims 12-13 have been added. Thus, claims 1-13 are
presented for examination.

Response to Arguments

Applicant's arguments filed 03/12/2009 have been fully considered but they are
not persuasive.

Applicant argues with respect to claim 1 that the itinerary /fare class in a flight
network of Hornick is not analogous to the transport service/fare class of service
components of Applicant's invention. The Examiner disagrees. Applicant's specification
provides no explicit definition of transport service/fare class. Lacking this definition
results in a reasonable interpretation of an itinerary fare class being sufficient to satisfy
the limitations of the claim language.

Applicant asserts that Hornick does not teach "for the given class of service (k) on the

given transport service (Fi), an overall number of available seats XFAVFj k (Y) is

determined at the predefined level of expected revenue (Y) as a function of the different

number of seats available locally…, " as in amended claim 1. Examiner disagrees.

Hornick teaches a leg fare is computed for each fare class based on the EMSR or

Expected Marginal Seat Revenue thereby preserving the sense of the fare as a

measure of the contribution of a passenger to total revenue (see Col. 12 lines 36-65).

Applicant further asserts with respect to claim 2 that Hornick does not disclose numbers

of seats available locally of the two classes of service. Examiner disagrees. Hornick

plainly teaches multiple classes of service and the determination of seat availability (see

Col. 6 lines 1-20).

Applicant has amended the claim language to include "between two locations'.

This is already taught by Hornick as evidenced in Applicant's remarks pg. 13. The

diagram shows that the travel is between two locations. Ie. New York to Paris.

Applicant appears to be arguing the claims more narrowly than recited. Applicant's

claims do not distinguish the two respective locations as being the same in (k) and (ki)

in the body of the claim. Applicant's example in the remarks dated 03/12/2009 describe

Hornick as being directed to flight legs in an itinerary as opposed to separate legs on

unrelated itinerary. While the Applicant argues this distinction, the claim language does

not particularly recite this difference. Applicant is encouraged to amend the claim

language to coincide with the arguments presented.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in the art would have looked to Talluri as it is concerned with airline revenue yield management systems.

Applicant's arguments with respect to Hornick and Talluri are not persuasive and the rejections are maintained.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-2, 10 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hornick U.S. Patent No. 5,255,184.

3.   As per Claim 1, Hornick teaches at least one other class of service (k') of another transport service (Fj) between said two locations is selected (see Col. 5 lines 2-11); the number of locally available seats aVFjk,(Y) is determined for the class of service (k') of the another transport service (Fj) at the predefined level of expected revenue

(Y) (see Col. 6 lines 48-56 and Col. 5 lines 46-51);

for the given class of service (k) on the given transport service (fi),

an overall number of available seats XFAVFjk(Y) is determined at the predefined level

of expected revenue (Y) as a function numbers of locally available seats (aVFik(Y),

determined for the given transportation service and the at least another transport

service between said two locations (see Col. 6 lines 48-56).

4.   As per Claim 2, Hornick teaches the method of claim 1 as described above.

Hornick further teaches the overall number of available seats XFAVFik(Y) is determined

by adding up the numbers of seats available locally (avid(Y), avfjk(Y)) of the two classes

of service (k, k') (see Col. 6 lines 48-56and Col. 7 lines 1-45) determined for the given

transportation service and the at least another transport service between said two

locations (see Col. 6 lines 48-56).

5.   As per Claim 10, Hornick teaches the method of claim 1 as described above.

Hornick further teaches the steps in the process are carried out each time there is an

availability request from a customer (see Col. 6 lines 1-20)

6.   As per Claim 12, Hornick teaches the method of claim 1 as described above.

Hornick further teaches wherein the transport service is a flight (see Col. 4 lines 56).

7.   As per Claim 13, Hornick teaches the method of claim 12 as described above.

Hornick further teaches wherein the flight is a single flight (see Fig. 4 and Col. 20 lines

55-60).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 3-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hornick in view of Talluri U.S. Patent No. 6,263,315 B1.

10.   As per Claim 3, Hornick teaches the method of claim 1 as described above.

Hornick does not explicitly teach the method taught by Talluri

- to each class of service a boundary transfer value (SPmax) is assigned that

corresponds to the maximum number of reservation requests for the class of service

that can be transferred to seats on other classes of service (see Col. 2 lines 10-14);

- for each class of service, a number of transferable reservation requests (SP(Y)) is

determined that is equal to:

• either zero, if the number of seats available locally for said class of service (k) is

positive (see Col. 2 lines 10-14).

for each class of service, a number of reservation requests that can be accepted

(SA(Y) is determined that is equal to:

• or the number of seats available locally for said class of service avk(Y) if this number

is positive (see Col. 1 lines 65-67 and Col. 2 lines 1-27). It would have been prima facie

obvious to one of ordinary skill in the art at the time of invention to modify the method of

Hornick to include the teachings of Talluri to incorporate booking limitations, as taught by Talluri Col. lines 10-15).

11.   As per Claim 4, Hornick in view of teaches the method of claim 1 as described above. Hornick does not explicitly teach the limitation taught by Talluri to each class of service a boundary acceptance value (SAmax) is assigned that corresponds to the maximum number of seats in said class of service that can be used to transfer reservation requests on other classes of service; - an upper limit that is equal to the boundary acceptance value (SAmax) is assigned to the number of reservation requests that can be accepted (see Col. 2 lines 1-22 and Col. 3 lines 8-16). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Hornick to include the teachings of Talluri to allow a maximum available capacity for a demand class, as taught in Talluri Col. 3 lines 14-16.

12.   As per Claim 5, Hornick teaches the method of claim 3 as described above. Hornick further teaches a single other class of service (k') that belongs to another transport service (Fj) is selected; - the total acceptance capacity (TSAk) from the other class of service (k') for the given class of service (k) is determined by selecting the minimum value from the boundary transfer value (SPFjkmax) of the given class of service (k) and the number of reservation requests that can be accepted (SAFjk'(Y)) on said other class of service (k') (see Col. 24 lines 41-60), the total transfer capacity (TSPk) on said other class of service (k') is determined on the given class of service (k) by selecting the minimum value from the number of transferable reservation requests for the other class of service (k') (SPFjk' (Y)) (see Col. 24 lines 41-60) and the number

of reservation requests that can be accepted on the given class of service (k)

(SAFik(Y)), the overall number of available seats XFAVFik(Y) is calculated by • adding

the number of seats available locally aVFik(Y) and the total acceptance capacity

TSAFik(Y) (see Col. 25 lines 11-22). The limitation, "and subtracting therefrom the total

transfer capacity TSPFik(Y)" is merely a statement of intended use and as such is

afforded little patentable weight.

13.   As per Claim 6, Hornick in view of Talluri teaches the method of clam 4 as

described above. Hornick further teaches for each class of service (k) of a given

transport service (Fi), the classes of service (k') of the transport service are selected

that have a lower index to which the reservation requests on the class of service of the

given transport service (Fi) can be transferred (see Col. 12 lines 36-49). Hornick does

not explicitly teach the limitation taught by Talluri, an index i is assigned to each

transport service, whereby the value of said index increases with the time of departure,

(see Col. 6 lines 24-30, Examiner is interpreting the threshold value to have the

equivalent effect of an index based on a departure time). It would been prima facie

obvious to one of ordinary skill in the art at the time of invention to modify the method of

Hornick to include the teachings of Talluri to assign a weigh to a parameter lines 55-59.

The limitation, "a transport service chain (Fi) is formed that has successive departure

times and where each departure time has a selected class of service (k, k')" is merely a

statement of intended result and as such is afforded little patentable weight.

14.   As per Claim 7, Hornick in view of Talluri teaches the method of claim 6 as

described above. Hornick further teaches the total acceptance capacity TSAFik(Y) for

the class of service (k) is determined by selecting the minimum value from the boundary

transfer value(SPFikmax) of the given class of service (k) and the sum of the numbers

of reservation requests that can be accepted (SAFjk,(Y)) for the classes of service (k') of

transport services (Fj) to which the given class of service (k) can be transferred (see

Col. 24 lines 41-60).

15.   As per Claim 8, Hornick in view of Talluri teaches the method of claim 7 as

described above. Hornick further teaches the total transfer capacity TSPFik from all of

the other classes of service to a class of service (k) is determine from the update of the

number of reservation requests that can be accepted to said class of service (k) (see

Co. 24 lines 41-60 and Col. 5 lines 51-65).

16.   As per Claim 9, Hornick in view of Talluri teaches the method of claim 8 as

described above. Hornick further teaches the overall number of available seats

XFAVFik(Y) is calculated by adding the number of seats available locally aVFik(Y) and

the total acceptance capacity TSAFik(Y) (see Col. 25 lines 11-22). The limitation, "and

subtracting therefrom the total transfer capacity TSPFik(Y)" is merely a statement of

intended use and as such is afforded little patentable weight.

17.   As per Claim 11, Hornick in view of Talluri teaches the method of claim 6 as

described above. Hornick further teaches the total transfer capacity TSPFik from all of

the other classes of service to a class of service (k) is determine from the update of the

number of reservation requests that can be accepted to said class of service (k) (see

Co. 24 lines 41-60 and Col. 5 lines 51-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONYA JOSEPH whose telephone number is (571)270-1361. The examiner can normally be reached on Mon-Fri 7:30am-5:00pm First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tonya Joseph
Examiner
Art Unit 3628

/John W Hayes/
Supervisory Patent Examiner, Art Unit 3628